Disease of the median raphe of the penis Report of two cases

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Disease of the median raphe of the penis has rarely been reported in the recent literature (Bernfeld, 1961). Two cases seen within 6 weeks in this department are described below.

Case 1. Gonorrhoea of the median raphe

A 16-year-old white youth, coming from a socially deprived background, presented in September, 1972. He had had numerous sexual contacts until 3 weeks before his first attendance at the clinic when he had developed a severe pain at the tip of the penis and a urethral discharge.

Examination

There was a profuse purulent urethral discharge. Three pustules were situated along the line of the median raphe which was swollen, red, and indurated (Figure). The skin lesions were exquisitely tender on palpation.

Investigations

Gonococci were cultured from the urethral discharge and from the pustules. The cardiolipin Wassermann reaction (CWR), Venereal Diseases Reference Laboratory (VDRL), and Reiter protein complement-fixation (RPCF) tests were negative

Hb 15·2 g./100 ml.; WBC 8,800 per cu.mm.; erythrocyte sedimentation rate 4 mm./1st hr. Neutrophil polymorph reaction, measured by the nitroblue tetrazolium test (Park, Fikrig, and Smithwick, 1968), increased. Serum IgA, measured by the radial immunodiffusion technique, reduced.

Course

The patient was treated with 2 g. kanamycin intramuscularly. The discharge and superficial lesions resolved rapidly and completely.

Discussion

Gonorrhoea of the median raphe was last reported in the English language literature by Bernfeld (1961), who described a case and reviewed previous reports. He classified cases into two groups, those in which

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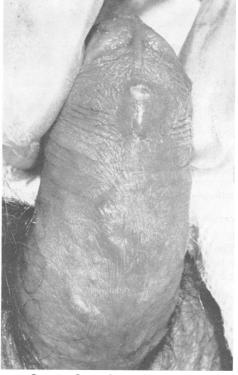


FIGURE Case 1. Gonorrhoea of the median raphe, showing one large and two small pustules

a cord or tract was present in the line of the raphe and those in which the lesions were on or near the raphe; Mee (1949) described a sinus tract lined by stratified epithelium situated in the raphe. The features in our patient suggested the presence of such a tract, but careful observation failed to reveal any sinus opening and, as resolution was satisfactory, excision of the raphe did not seem to be indicated.

The reduced serum IgA suggested the possibility of a reduced secretory IgA, leading to increased susceptibility to infection in a tract lined with epithelial cells. On the other hand, the result of the nitroblue tetrazolium test indicated that the patient's neutrophils responded normally to infection. The skin lesions in our patient were exquisitely tender, a feature not previously emphasized.

Case 2. Ecchymosis of the median raphe

A 33-year-old white man attended in October, 1972, with a wart on the dorsum of the prepuce. Clinical examination showed no other abnormality, the urine was normal and CWR, VDRL, and RPCF tests were negative.

Treatment and course

The wart was cauterized after 0.5 ml. of 0.5 per cent. lignocaine had been infiltrated using a 25-gauge needle. No bleeding occurred. When he was seen a week later the patient had no complaints; the wart was resolving, but a continuous band of ecchymosis was noted which was 3 mm. across and extended the length of the penile raphe. No other bruising was present.

Further questioning at this stage revealed that a daughter had had three severe epistaxes, but the patient himself had no history of a bleeding tendency.

Further investigations

Hb 14.5 g./100 ml.; WBC 8,400 per cu. mm.; ESR 3 mm./1st hr; platelet count 210,000 per cu.mm.; Hess test normal. Full clotting screening tests gave normal results.

The wart resolved without further treatment and the

ecchymosis cleared.

Discussion

Case 2 is presented here because no record of a similar condition has been found in the literature. The band of ecchymosis was too wide for the blood to be in a sinus. The penile tunica albuginea is

relatively thick around the corpora cavernosa but fans out and becomes thin around the corpus spongiosum (Davies and Coupland, 1967). Extravasated blood in the deeper tissues of the dorsal region could thus become superficial as it tracked ventrally. Presumably subcutaneous tissues beneath the raphe are looser than elsewhere, allowing extravasated blood to appear and track proximally.

Summary

Two cases of disease involving the median raphe of the penis are presented. In one, urethral gonorrhoea was complicated by gonorrhoea of the raphe and a low serum IgA was found. In the other, an unusual band of ecchymosis appeared under the raphe after lignocaine had been infiltrated beneath a wart situated on the dorsum of the prepuce.

References

BERNFELD, W. K. (1961) Brit. J. vener. Dis., 37, 210
DAVIES, D. V., and COUPLAND, R. E. (1967) 'Gray's Anatomy', 34th ed., p. 1562. Longmans, London
MEE, R. A. (1949) Amer. J. Syph., 33, 182
PARK, B. H., FIKRIG, S. M., and SMITHWICK, E. M. (1968) Lancet, 2, 532

Maladies du raphé médian de la verge

SOMMAIRE

Deux cas de maladies concernant le raphé médian de la verge sont présentés. Dans l'un, une gonococcie urétrale fut compliquée par une atteinte gonococcique du raphé et il fut trouvé un taux faible d'IgA sérique. Dans l'autre, une bande ecchymotique inhabituelle apparut sous le raphé après infiltration de lignocaïne sous une végétation située sur la partie dorsale du prépuce.